

May 13, 2004

Timothy T. Travers  
Alternate Authorized Account Representative  
FPL Energy  
P.O. Box 426  
Delaware Avenue & Green Street  
Marcus Hook, PA 19061-0426

Re: Request for an Extension of the CEMS Certification Deadline for Three  
Combined-Cycle Turbines in the Marcus Hook L.P. Power Project (Facility ID  
(ORISPL) 55801)

Dear Mr. Travers:

This is in response to your letter dated January 26, 2004, in which FPL Energy (FPL) requested an extension of the continuous emission monitoring system (CEMS) certification deadline for three new combined-cycle turbines at the Marcus Hook, Pennsylvania facility. EPA approves the petition, with conditions, as discussed below.

#### Background

FPL is currently constructing a 750 MWe electrical generation facility, known as the Marcus Hook L.P. Power Project, in Marcus Hook, Pennsylvania. The facility will consist of three combined-cycle turbine units with duct burners and four auxiliary boilers. The combustion turbines will fire only natural gas, but the duct burners and auxiliary boilers can fire either natural gas or refinery gas provided by the local Sunoco Refinery in Marcus Hook.

The three combined-cycle units, known as Units 0001, 0002 and 0003, are subject to the Acid Rain Program and are also affected units in the NO<sub>x</sub> Budget Program, under 25 Pa. Code Chapter 145. To meet the Acid Rain Program requirements, FPL must continuously monitor and report sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>) and carbon dioxide (CO<sub>2</sub>) emissions and heat input for these units, according to 40 CFR Part 75. To satisfy the NO<sub>x</sub> Budget Program requirements, FPL must also continuously monitor and report NO<sub>x</sub> mass emissions and heat input in accordance with Subpart H of Part 75.

According to FPL, the commencement of operation ("first fire") of Units 0001, 0002, and 0003 is scheduled for May and June, 2004. The units will "commence commercial operation", as defined in §72.2, soon after first fire, as FPL intends to sell test generation from the units to

the power grid<sup>1</sup>.

Under §75.4(b), the continuous monitoring systems required by the Acid Rain Program (ARP) must be certified no later than 90 unit operating days or 180 calendar days (whichever occurs first) after the unit commences commercial operation. According to §75.64(a), for new ARP units, emissions and heat input data must be reported from the earlier of: (1) the date and hour that the certification tests are actually completed; or (2) the date and hour of the deadline for initial certification.

However, the NO<sub>x</sub> Budget Program certification and reporting requirements for Units 0001, 0002 and 0003 are different from those of the Acid Rain Program. According to §145.70(2)(iii) of 25 Pa. Code Chapter 145, for new electric generating units (EGUs) that commence operation on or after January 1, 2002, the required continuous monitoring systems for NO<sub>x</sub> mass emissions and heat input must be certified no later than 90 calendar days after the commencement of commercial operation. Further, for EGU units that commence operation after May 1, 2002, §145.74(d)(iii) requires the owner or operator to report NO<sub>x</sub> mass emissions and heat input data beginning with the date and hour that the unit commences operation, i.e., from first-fire.

For Units 0001, 0002 and 0003, the exact same types of continuous monitoring systems are needed to meet the Acid Rain and NO<sub>x</sub> Budget Program requirements, i.e., NO<sub>x</sub>-diluent CEMS and fuel flowmeters. Therefore, the more stringent NO<sub>x</sub> Budget Program rule provisions, which require FPL to certify the monitoring systems within 90 days of commencing commercial operation and to report data from first-fire, govern in this case.

In the January 26, 2004 petition, FPL requested an extension of the monitoring system certification deadline in §145.70(2)(iii) for Units 0001, 0002, and 0003, stating that 90 calendar days from the commencement of commercial operation is inadequate to complete all of the required tests of the NO<sub>x</sub>-diluent CEMS. According to FPL, the units will not be stable enough on the 90<sup>th</sup> day to allow representative relative accuracy test audits (RATAs) of the NO<sub>x</sub> CEMS to be performed. The reason for this is that upon first-fire, each unit must undergo a series of preliminary (“shakedown”) tests and operations that are projected to take between 120 and 140 days to complete. These preliminary activities include initial synchronization and tuning checks and steam blows, followed by a 22-day outage during which the catalyst for the selective catalytic reduction (SCR) emission controls will be loaded. Further, during the shakedown period, the units must operate at load levels which preclude operation in the normal low-NO<sub>x</sub> mode. In light of these considerations, FPL requested permission to apply the certification deadlines in §75.4(b)(2) to Units 0001, 0002, and 0003, i.e., to be allowed to complete certification testing by the earlier of 90 unit operating days or 180 calendar days following the commencement of commercial operation.

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<sup>1</sup> This was confirmed in a telephone conversation with FPL during the week of March 1, 2004.

### EPA's Determination

EPA conditionally approves FPL's petition to apply the monitoring system certification deadlines in §75.4(b)(2) to Units 0001, 0002 and 0003 at the Marcus Hook facility. EPA believes that the request for an extension of the NO<sub>x</sub> Budget Program certification deadline is reasonable in view of the length of time needed for the shakedown activities and in light of the fact that representative RATA testing cannot be performed within the 90 day window allotted for initial certification under §145.70(2)(iii) of 25 Pa. Code Chapter 145.

Note, however, that although EPA is granting an extension of the continuous monitoring system certification deadlines for Units 0001, 0002 and 0003, EPA is not similarly extending the dates on which reporting of emissions data is first required for these units. Therefore, FPL must report NO<sub>x</sub> mass emissions and heat input data for each unit beginning with the hour that the unit commences operation (i.e., first-fire), as required by §145.74(d)(iii) of 25 Pa. Code Chapter 145. Further, as a condition of approval of the January 26, 2004 petition, FPL shall report emissions data for each unit as follows, for each operating hour in the time interval extending from first-fire to the completion of the required certification testing:

- (1) For an uncertified NO<sub>x</sub>-diluent monitoring system, the maximum potential NO<sub>x</sub> emission rate, as defined in §72.2, shall be reported, except that the conditional data validation procedures of §75.20(b)(3) may be used prior to initial certification, in accordance with §75.70(g)(6); and
- (2) For an uncertified fuel flowmeter, the maximum potential fuel flow rate, as defined in section 2.4.2.1 of Appendix D to Part 75, shall be used to calculate the hourly unit heat input.

EPA's determination in this letter relies on the accuracy and completeness of the information provided by FPL in the January 26, 2004 petition and is appealable under Part 78. If you have any questions about this determination, please contact Robert Vollaro, at (202) 343-9116. Thank you for your continued cooperation.

Sincerely,

/s/  
Sam Napolitano, Director  
Clean Air Markets Division

cc: Jerry Curtin, EPA Region III  
Joseph Nazzaro, Pennsylvania DEP  
Randy Bordner, Pennsylvania DEP  
Robert Vollaro, CAMD